

IN THE CLAIMS:

Please cancel Claims 1-4 and simultaneously add the following new claims.

1-4. (Canceled)

5. (New) A method for plating zinc-containing coatings under alkaline conditions comprising:

providing an electroplating cell having an anode and a cathode;

separating said anode from said cathode by an ion-exchange membrane to provide an anode compartment and a cathode compartment;

introducing into said cathode compartment an alkaline electrolyte with metal ions for a zinc-containing coating.

6. (New) The method of Claim 5 comprising introducing an alkaline electrolyte with metal ions for a zinc-nickel coating into said cathode compartment.

7. (New) The method of Claim 6 comprising introducing an anolyte into said anode compartment, wherein said anolyte is selected from the group consisting of sulfuric acid, phosphoric acid, methanesulfonic acid, amidosulfonic acid and/or phosphonic acid.

8. (New) The method of Claim 7 further comprising introducing a complex former for nickel into said electrolyte.

9. (New) The method of Claim 6 wherein said complex former comprises an amine.

10. (New) A method of inhibiting cyanide formation in an electroplating cell comprising an anode and a cathode and an alkaline electroplating bath with an alkaline electrolyte with metal ions for a zinc-metal coating comprising:

introducing an alkaline electrolyte with metal ions for a zinc-containing coating;

introducing a complex former into said alkaline electrolyte, said complexing agent comprising an amine.

at least substantially preventing contact between said anode and said amine.

11. (New) The method of Claim 10 comprising at least substantially preventing contact between said anode and said amine by separating said anode from said cathode member to provide an anode compartment and a cathode compartment.

12. (New) The method of Claim 10 comprising at least substantially preventing contact between said anode and said amine by separating said anode from said cathode with a selectively permeable membrane capable of allowing at least substantially unimpeded flux of current therethrough, but being at least substantially impermeable to said amine.

13. (New) The method of Claim 12 wherein said membrane comprises an ion-exchange membrane.

14. (New) A membrane adapted for separating an anode from an alkaline cathode bath in an electroplating cell.

15. (New). The membrane of Claim 14 comprising a polymeric material having a low electrical resistance and being at least substantially impermeable to amines.

16. (New). The membrane of Claim 14 comprising a perfluorinated polymer.